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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/547,126	04/11/2000	Fred R. Huege	0438CG-54	4486

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EXAMINER

BERNATZ, KEVIN M

ART UNIT	PAPER NUMBER
1773	3

DATE MAILED: 09/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

mp -3

Office Action Summary	Application No.	Applicant(s)	
	09/547,126	HUEGE ET AL.	
	Examiner	Art Unit	

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 22-26 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-21 is/are rejected.
- 7) Claim(s) 1 and 12 is/are objected to.
- 8) Claim(s) 1-36 are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

<ol style="list-style-type: none"> 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u>. 	<ol style="list-style-type: none"> 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____.
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DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1 - 21, drawn to an asphalt roll roofing or shingle, classified in class 428, subclass 489.
 - II. Claims 22 - 36, drawn to method of making an asphaltic roll roofing or shingle while heating, classified in class 427, subclass 207.1.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process as claimed can be used to make other and materially different products, such as asphalt for filling potholes and paving roadways instead of asphalt on a substrate form.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Mr. Charles Gunter, Jr. on August 28, 2002 a provisional election was made without traverse to prosecute the invention of Group I, claims 1 - 21. Affirmation of this election must be made by applicant in replying to this

Office action. Claims 22 – 36 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract of the disclosure is now limited to 150 words or 15 lines (37 CFR 1.72). See MPEP § 608.01(b).

The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

7. Claims 1 and 12 are objected to because of the following informalities: claims 1 and 12 are confusing because they are product claims (i.e. asphalt composition applied to a substrate form), but are worded as a composition claim (i.e. "An asphalt roofing composition ..."). For clarity, the examiner recommends rewording the claims to more clearly distinguish that the product (i.e. substrate form with an asphalt composition) is being claimed and not just the asphalt composition: i.e. "An asphalt structure comprising ...", or something similar. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Regarding claims 1 and 12, the phrase "shingle-like" renders the claim indefinite. The addition of the word "like" to an otherwise definite expression extends the scope of the expression so as to render it indefinite. *Ex parte Copenhaver*, 109 USPQ 118 (Bd.App. 1955). *Ex parte Caldwell*, 1906 C.D. 58 (Comm'r Pat. 1906). See MPEP § 2173.05(b).

11. The term "hot" in claims 1 and 12 is a relative term which renders the claims indefinite. The term "hot" is not defined by the claim, the specification does not provide

a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

12. Regarding claims 3, 4, 11, 14, 15 and 21, the phrase "... between about ..." renders the claim(s) indefinite because the metes and bounds are ill defined. The phrase "between X and Y", meaning any value ranging from X to Y, excluding X and Y, is well defined if both X and Y are well defined. If either, or both, of X and Y are not well defined, then the phrase is indefinite because it is unclear which values are to be excluded from the range. Deleting the word(s) "about" from the claim(s) is sufficient to overcome this rejection. While the examiner notes that "about" *can* be definite, the specification must provide explicit evidence as to what values are meant to be include or excluded by the use of the phrase "about". *Jurgens v. McKasy*, 18 USPQ2d 1016 (CAFC 1991). *Amgen, Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 18 USPQ2d 1016 (Fed. Cir. 1991). See MPEP § 2173.05(b).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1 – 4, 7 – 15 and 18 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over George et al. (U.S. Patent No. 5,516,573) in view of Anthenien et al. (U.S. Patent No. 3,951,895).

Regarding claims 1 and 12, George et al. disclose an asphalt roofing structure in the form of a roll or shingle (col. 1, lines 20 – 22; col. 2, line 65 bridging col. 3, line 1), in which a mixture of an asphaltic base and filler (col. 5, lines 6 – 45) is applied to a substrate form.

George et al. fail to disclose adding an amount of an alkaline earth metal hydroxide to the asphalt composition.

However, Anthenien et al. teach an improved asphalt composition for use in roofs (col. 1, lines 25 – 26) which comprises hydrated lime in an emulsion (i.e. with water), an asphalt and a filler (col. 2, lines 3 – 6 and claims 4 and 5). The examiner notes that hydrated lime is a known form of an alkaline earth metal hydroxide (see applicants' specification, page 8, lines 5 - 6).

The limitation(s) "in order to impart strength and durability to the composition" is (an) intended use limitation(s) and is not further limiting in so far as the structure of the product is concerned. "[I]n apparatus, article, and composition claims, intended use must result in a ***structural difference*** between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. ***If the prior art structure is capable of performing the intended use, then it meets the claim.*** In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art." [emphasis added] *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); *In re Otto*, 312 F.2d 937, 938, 136 USPQ 458, 459 (CCPA 1963). See MPEP § 2111.02. The examiner deems that the disclosed composition would possess sufficient strength and durability since the composition is

substantially identical to applicants' claimed compositions, regardless of the reason for Anthenien et al. to add the alkaline earth metal hydroxide.

In claim 12, the limitation "comprises an amount of an alkaline earth metal oxide ... to produce the corresponding metal hydroxide" is a product-by-process limitation and is not further limiting in so far as the structure of the product is concerned. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. ***The patentability of a product does not depend on its method of production.*** If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process."

[emphasis added] *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP § 2113. Once a product appearing substantially identical is found, the burden shifts to applicant to show an ***unobvious*** difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). In the instant case, the final product of Anthenien et al. possesses an alkaline earth metal hydroxide, which is equivalent to the final product claimed in claim 12. As such, the two products possess substantially identical final compositions and the invention of Anthenien et al. is therefore deemed to read on applicants' claimed limitations.

Finally, Anthenien et al. disclose that the improved asphaltic composition has good flowability ("the mixture seeped into the cracks ... ", col. 2, lines 12 – 13), is very durable, water resistant and has improved flexibility (col. 2, lines 31 – 33).

Since George et al. disclose that the asphalt used in the roll roofing or shingle must saturate the substrate form “to the greatest possible extent with a “saturant” asphalt (George et al., col. 5, lines 9 – 13), it would therefore have been obvious to one of ordinary skill in the art at the time of the applicant’s invention to modify the device of George et al. to use the asphalt composition taught by Anthenien et al. since it leads to good flowability, durability, water resistance and improved flexibility.

Regarding claims 2 and 13, hydrated lime meets applicants’ claimed limitations.

Regarding claims 3, 4, 14 and 15, Anthenien et al. disclose adding an amount of alkaline earth metal hydroxide meeting applicants’ claimed limitations (1.5 – 5.7% hydrated lime) (col. 2, lines 19 – 23 and claims 3 - 5). It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as the amount of hydrated lime added through routine experimentation in the absence of a showing of criticality in the claimed percentage, given the teachings in Anthenien et al. regarding acceptable amounts of hydrated lime to be added for improving the moisture resistance and flexibility of an asphalt composition. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Regarding claims 8 – 10, 19 and 20, these limitations are product-by-process limitations and are not further limiting in so far as the structure of the article is concerned for the reasons cited above. In the instant case, the final product of Anthenien et al. possesses a substantially identical final composition (asphalt + filler + alkaline earth metal hydroxide) as applicants’ claimed final composition and there is no

evidence of record that any of the claimed processes result in an unobvious difference between the prior art product and the claimed product.

Regarding claims 11 and 21, Anthenien et al. disclose adding up to 33% asphalt (col. 2, lines 19 – 23 and claims 3 - 5). It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as the asphalt amount through routine experimentation in the absence of a showing of criticality in the claimed asphalt amount, given that the asphalt must adequately bind the filler while providing both a water impermeable layer as well as providing suitable adhesion for granules on the outer most surface (George et al., Figures). *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

15. Claims 5 - 7 and 16 - 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over George et al. in view of Anthenien et al. as applied above, and further in view of applicants' admissions.

Regarding claims 5 – 7 and 16 – 18, George et al. in view of Anthenien et al. disclose the claimed invention as described above.

Anthenien et al. fail to disclose adding fillers meeting applicants' claimed limitations.

However, applicants admit that the claimed fillers are old in the art of fillers added to asphalt compositions for use in shingles and roll roofing (page 3, line 26 bridging

page 4, line 19) and that the appropriate choice of filler depends on the cost, compatibility with the asphalt and aesthetic quality of the shingles.

It would therefore have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device of George et al. in view of Anthenien et al. to use fillers meeting applicants' claimed limitations as admitted by applicants as known fillers used in shingles and roll roofing, depending on the cost, compatibility with the asphalt and desired aesthetics.

16. Claims 1 – 4, 6, 8 – 15, 17 and 19 - 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over George et al. ('573) in view of IDS reference Karácsonyi née Éva Spindler et al. [hereafter this patent will be referred to as "Karácsonyi et al"] (U.S. Patent No. 4,544,410).

Regarding claims 1 and 12, George et al. disclose an asphalt roofing structure in the form of a roll or shingle (col. 1, lines 20 – 22; col. 2, line 65 bridging col. 3, line 1), in which a mixture of an asphaltic base and filler (col. 5, lines 6 – 45) is applied to a substrate form.

George et al. fail to disclose adding an amount of an alkaline earth metal hydroxide to the asphalt composition.

However, Karácsonyi et al. teach an aqueous asphalt composition for use in roofs (Title and col. 1, line 16) which comprises an excess of an alkaline earth metal hydroxide, an asphalt and a filler (col. 1, line 60 bridging col. 2, line 43; Examples; and claims 1 and 5).

The limitation(s) "in order to impart strength and durability to the composition" is (an) intended use limitation(s) and is not further limiting in so far as the structure of the product is concerned for the reasons cited above. The examiner deems that the disclosed composition would possess sufficient strength and durability since the composition is substantially identical to applicants' claimed compositions, regardless of the reason for Karácsonyi et al. to add the alkaline earth metal hydroxide.

In claim 12, the limitation "comprises an amount of an alkaline earth metal oxide ... to produce the corresponding metal hydroxide" is a product-by-process limitation and is not further limiting in so far as the structure of the product is concerned for the reasons cited above. In the instant case, the final product of Karácsonyi et al. possesses an alkaline earth metal hydroxide, which is equivalent to the final product claimed in claim 12. As such, the two products possess substantially identical final compositions and the invention of Karácsonyi et al. is therefore deemed to read on applicants' claimed limitations.

Finally, Karácsonyi et al. disclose that the disclosed asphaltic composition has good insulating and bonding properties, as well as excellent water resistance (col. 2, line 68 bridging col. 3, line 7 and col. 4, lines 43 – 44).

It would therefore have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device of George et al. to use the asphalt composition taught by Karácsonyi et al. since it leads to good insulating and bonding properties, as well as excellent water resistance.

Regarding claims 2 and 13, Karácsonyi et al. disclose alkaline earth metal hydroxides meeting applicants' claimed limitations (col. 2, lines 24 – 30).

Regarding claims 3, 4, 14 and 15, Karácsonyi et al. disclose adding an excess amount of alkaline earth metal hydroxide compared to the aluminum salt (col. 1, lines 65 – 67 and claims 1 and 5).

It has been held that where claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established and the burden of proof is shifted to applicant to show that prior art products do not necessarily inherently possess characteristics of claimed products where the rejection is based on inherency under 35 USC 102 or on *prima facie* obviousness under 35 USC 103, jointly or alternatively. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). “When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.” *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the *prime facie* case can be rebutted by **evidence** showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

In the instant case, the disclosed examples possess a substantially identical composition as applicants' claimed composition (asphalt + metal hydroxide + filler) and would appear to result in residual alkaline earth metal hydroxide amounts meeting applicants' claimed limitations (especially example 2). Even should the disclosed

examples not possess weight percents meeting applicants' claimed limitations, it would have still be obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as the amount of hydrated alkaline metal hydroxide through routine experimentation in the absence of a showing of criticality in the claimed amount of hydrated alkaline metal hydroxide, given the disclosed ratio of aluminum salt and metal hydroxide (claim 5) and the amount of aluminum hydroxide desired (col. 2, lines 5 – 15 and Examples). *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Regarding claims 6 and 17, Karácsonyi et al. teach adding fillers meeting applicants' claimed limitations (col. 4, line 50, where limestone is CaCO_3 – applicants' specification, page 3, line 29).

Regarding claims 8 – 10, 19 and 20, these limitations are product-by-process limitations and are not further limiting in so far as the structure of the article is concerned for the reasons cited above. In the instant case, the final product of Karácsonyi et al. possesses a substantially identical final composition (asphalt + filler + alkaline earth metal hydroxide) as applicants' claimed final composition and there is no evidence of record that any of the claimed processes result in an unobvious difference between the prior art product and the claimed product.

Regarding claims 11 and 21, Karácsonyi et al. disclose adding asphalt amounts meeting applicants' claimed limitations (col. 2, lines 1 – 2 and lines 37 - 43). It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as the asphalt amount through routine

experimentation in the absence of a showing of criticality in the claimed asphalt amount, given that the asphalt must adequately bind the filler while providing both a water impermeable layer as well as providing suitable adhesion for granules on the outer most surface (George et al., Figures). *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

17. Claims 5, 7, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over George et al. in view of Karácsonyi et al. as applied above, and further in view of applicants' admissions.

Regarding claims 5, 7, 16 and 18, George et al. in view of Karácsonyi et al. disclose the claimed invention as described above.

Karácsonyi et al. fail to disclose adding fillers meeting applicants' claimed limitations.

However, applicants admit that the claimed fillers are old in the art of fillers added to asphalt compositions for use in shingles and roll roofing (page 3, line 26 bridging page 4, line 19) and that the appropriate choice of filler depends on the cost, compatibility with the asphalt and aesthetic quality of the shingles.

It would therefore have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device of George et al. in view of Karácsonyi et al. to use fillers meeting applicants' claimed limitations as admitted by applicants as known fillers used in shingles and roll roofing, depending on the cost, compatibility with the asphalt and desired aesthetics.

18. Claims 1 – 3, 8 – 10, 12 – 14, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over George et al. ('573) in view of either Little et al. (U.S. Patent No. 6,027,558) or Little et al. (WO 99/02620). Since both Little et al. references disclose identical subject matter, the examiner will cite page + line numbers only in the WO '620 reference to avoid confusion. Appropriate sections of US '558 have also been underlined for applicants convenience.

Regarding claims 1 and 12, George et al. disclose an asphalt roofing structure in the form of a roll or shingle (col. 1, lines 20 – 22; col. 2, line 65 bridging col. 3, line 1), in which a mixture of an asphaltic base and filler (col. 5, lines 6 – 45) is applied to a substrate form.

George et al. fail to disclose adding an amount of an alkaline earth metal hydroxide to the asphalt composition.

However, Little et al. teach an asphalt composition comprising an alkaline earth metal hydroxide (page 3, lines 17 – 25) which possesses good anti-stripping properties, moisture resistance, inhibited age hardening and improved toughness (page 2, lines 15 – 24).

The limitation(s) "in order to impart strength and durability to the composition" is (an) intended use limitation(s) and is not further limiting in so far as the structure of the product is concerned for the reasons cited above. The examiner deems that the disclosed composition would possess sufficient strength and durability since the

composition is substantially identical to applicants' claimed compositions, regardless of the reason for Little et al. to add the alkaline earth metal hydroxide.

In claim 12, the limitation "comprises an amount of an alkaline earth metal oxide ... to produce the corresponding metal hydroxide" is a product-by-process limitation and is not further limiting in so far as the structure of the product is concerned for the reasons cited above. In the instant case, the final product of Little et al. possesses an alkaline earth metal hydroxide, which is equivalent to the final product claimed in claim 12. As such, the two products possess substantially identical final compositions and the invention of Little et al. is therefor deemed to read on applicants' claimed limitations.

It would therefore have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device of George et al. to use the asphalt composition taught by Little et al. since it leads to good anti-stripping properties, moisture resistance, inhibited age hardening and improved toughness.

Regarding claims 2 and 13, Little et al. disclose alkaline earth metal hydroxides meeting applicants' claimed limitations (page 3, lines 20 – 25).

Regarding claims 3 and 14, Little et al. disclose amounts of alkaline earth metal hydroxides meeting applicants' claimed limitations (page 2, lines 3 – 6). The examiner notes that "about 10% to 20%" reads on the claimed range of "between 1 – 10%" since "about 10%" includes values slightly below 10%.

Regarding claims 8 – 10, 19 and 20, these limitations are product-by-process limitations and are not further limiting in so far as the structure of the article is concerned for the reasons cited above. In the instant case, the final product of Little et

al. possesses a substantially identical final composition (asphalt + filler + alkaline earth metal hydroxide) as applicants' claimed final composition and there is no evidence of record that any of the claimed processes result in an unobvious difference between the prior art product and the claimed product.

19. Claims 5 – 7 and 16 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over George et al. in view of either Little et al. reference as applied above, and further in view of applicants' admissions.

Regarding claims 5 – 7 and 16 – 18, George et al. in view of either Little et al. reference disclose the claimed invention as described above.

Neither Little et al. reference disclose adding fillers meeting applicants' claimed limitations.

However, applicants admit that the claimed fillers are old in the art of fillers added to asphalt compositions for use in shingles and roll roofing (page 3, line 26 bridging page 4, line 19) and that the appropriate choice of filler depends on the cost, compatibility with the asphalt and aesthetic quality of the shingles.

It would therefore have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device of George et al. in view of either Little et al. reference to use fillers meeting applicants' claimed limitations as admitted by applicants as known fillers used in shingles and roll roofing, depending on the cost, compatibility with the asphalt and desired aesthetics.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. IDS reference Huege et al. (U.S. Patent No. 5,512,093) teach known methods of making asphalt compositions comprising hydrated lime (col. 3, line 36 bridging col. 4, line 32). IDS reference Shepherd et al. (U.S. Patent No. 3,931,440) teach using 40 – 50 wt% asphalt for a roofing shingle (Title and col. 4, lines 49 – 52). Shuey et al. (U.S. Patent No. 5,578,118) teach different methods of adding anti-stripping agents to asphalt compositions (col. 7, line 64 bridging col. 8, line 3) and article titled "Hydrated Lime – A Solution for High Performance Hot Mix" gives a summary of the state of the art, clearly indicating that hydrated lime is a known anti-stripping agent that has been used since the late 1980's (highlighted sections + reference list). Finally, the article titled "The Benefits of Hydrated Lime in Hot Mix Asphalt" disclose many prior art references from 1999 and earlier that disclose that hydrated lime is a known additive to asphalt for use in roads and possesses many beneficial properties (highlighted sections; Figures; and reference list).

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M Bernatz whose telephone number is (703) 308-1737. The examiner can normally be reached on M-F, 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (703) 308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

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872-9310 for regular communications and (703) 872-9311 for After Final
communications.

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the receptionist whose telephone number is (703) 308-
0651.



KMB
September 4, 2002



Paul Thibodeau
Supervisory Patent Examiner
Technology Center 1700